

Quiz 3. KMP

1. Fill in the missing values of the overlap function for pattern

$P=aaabbababaaaa$

1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>a</i>	<i>a</i>	<i>a</i>	<i>b</i>	<i>b</i>	<i>a</i>	<i>b</i>	<i>a</i>	<i>b</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
0	1	2	0		1	0	1		1	2	3		

2. Consider the snapshot of a pattern vs text alignment during the KMP search.

The 5 first characters of P and T were compared, and the character at position 6 does not match.

- What is the start position (in T) of the next alignment of a pattern with a text?
- Determine the position of the character in T to be compared next:

	1	2	3	4	5	6	7	8	9	10	11	12	13
T	<i>a</i>	<i>a</i>	<i>b</i>	<i>a</i>	<i>a</i>	<u><i>b</i></u>	<i>a</i>	<i>b</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
P	<i>a</i>	<i>a</i>	<i>b</i>	<i>a</i>	<i>a</i>	<u><i>a</i></u>							